

ABSTRACT of MIL-R-10754(QMC)

11 December 1950

Use in lieu of

MIL-R-1507A

MILITARY SPECIFICATION

RATION, SMALL DETACHMENT, 5-in-1

DATE: 27 MAY 1951 REVIEWED: 011322

The 5-in-1 is the best ration and the best-packed for all round use. The quantities of individual items, however, require some <sup>sort of</sup> cooking installation & are designed to feed a small group. If individual feeding is demanded, and no particular kitchen facilities are available, the "C" ration (Ration, individual, combat) is probably best, although it is neither so varied nor so comprehensive as the 5-in-1.

### Cubes of Rations

C	6 rations, 6 meals	$18\frac{7}{16}" \times 12\frac{5}{16}" \times 7\frac{1}{4}"$
25	20 <sup>meals</sup> <del>meals</del> , 10 meals	$16\frac{3}{4}" \times 13\frac{1}{4}" \times 12"$
5 in 1	5 rations, 5 meals	$13\frac{3}{8}" \times 12\frac{3}{4}" \times 9\frac{1}{8}"$

### 1. REQUIREMENTS

3.1. ~~Preproduction sample approval.~~—When specified (see 6.1), a sample of the finished product shall be submitted to the contracting officer for approval before production is commenced.

3.2. Except where otherwise noted, compliance with specification requirements for ingredients used in the manufacture of the various components shall have been determined not more than 60 days prior to use of such ingredients.

3.3. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

3.4. ~~Menus.~~—The ration shall be packaged in 5 menus, as specified (see 3.5).

3.5. ~~Components.~~—This ration shall consist of the components in menus as specified in table I.

Table I.—Ration components.

Product	Container	Minimum net wt. (ounces)	Specification	Type Grade Class	Number of units per menu				
					1	2	3	4	5
Apricots	401 x 411	30	2-A-631 and par. 5.1.1	Style I(a) Grade B or better*		1			
Cherries, Royal Anne	401 x 411	30	2-C-301 and par. 5.1.1	Type II(a) Grade B or better*				1	
Fruit cocktail	401 x 411	30	2-F-681 and par. 5.1.1	Grade A*					1
Peaches	401 x 411	29	2-F-191 and par. 5.1.1	Type I or II, Style I, Grade B or better*			1		
Pineapple	401 x 411	29	2-F-351 and par. 5.1.1	Style I, II, or III, Grade B or better*	1				
Beans, green	307 x 409	19	JJJ-B-131 and par. 5.1.1	Type I, Grade B or better, Style I or			1		
Beans, lima	307 x 409	20	JJJ-B-126 and par. 5.1.1	Type I, Grade B or better		1			
Corn, whole-kernel	307 x 306	12	2-C-501 and par. 5.1.1	Style II, vacuum-packed Grade B, color Golden (yellow)	1				1
Pasta	307 x 409	30	JJJ-P-131 and par. 5.1.1	Type I or II, Grade B or better					1

\*To be packed in heavy wrap.

Table I.—Ration components (continued)

Product	Container	Minimum net wt. (ounces)	Specification	Type Grade Class	Number of units per meal				
					1	2	3	4	5
Tomatoes	307 x 409	19	JJJ-P-371 and par. 5.1.1	Extra Standard (grade B) or better				1	
Potatoes, white	401 x 411	29	MIL-P-3026			1	1	1	
Potatoes, sweet	401 x 411	29	JJJ-P-611 and par. 5.1.1	Style II Type (a)					
Bacon, sliced	307 x 510	24	MIL-B-3049			1	1		1
Beef and gravy	404 x 414	34	JAN-B-723	Type II	1		1		
Beef and vegetable	401 x 411	30	JAN-B-736						1
Beef, roast	404 x 312	24	JAN-B-791					1	
Ham and eggs	401 x 411	30	MIL-H-1038					1	
Ham	401 x 411	34	MIL-H-1021		1				
Hamburgers	300 x 409	15-1/4	MIL-H-1048	Type II				2	
Luncheon meat	3-7/8 x 2-1/8 x 3-1/4 or 3-3/4 x 1-15/16 x 3-3/8	12	MIL-L-1080	Type I or II					2
Meat balls and spaghetti	401 x 411	30	JAN-M-682				1		
Pork and gravy	401 x 411	30	MIL-P-1044	Type II		1			
Frankfurters	401 x 411	22	MIL-S-3069	Type II		1			
Sausage links, pork	401 x 411	28	MIL-S-1104	Type II	1				
Soup, chicken	211 x 400	10-1/2	JJJ-S-581 and par. 5.1.1		2				
Soup, tomato	211 x 400	10-1/2	JJJ-S-581 and par. 5.1.1						2
Bread-type unit (crackers) or canned bread	401 x 411	(8 crackers) 9 (bread)	MIL-C-1324, JAN-B-1070 and par. 3.6.1	Class 3 Size C (for crackers)	3	3	3	3	3
Cereal, premixed compressed block, Type A		1-1/2	JAN-C-1045 and par. 3.6.6		5		5		5
Cereal, premixed compressed block, Type B		1-1/2	JAN-C-1045 and par. 3.6.6			5		5	
Pudding, pine- apple and rice	300 x 409	18	MIL-P-1438			1			
Pudding, fig	300 x 409	12	MIL-P-1499	Type II			1		
Cake, fruit	300 x 409	12	MIL-P-1499	Type V					1
Pudding, date	300 x 409	12	MIL-P-1499	Type III				1	
Cheese-spread	300 x 200	6	JAN-C-595	Type I, Class 1			1		

Table I.—Ration components (continued)

Product	Container	Minimum net wt. (ounces)	Specification	Type Grade Class	Number of units per menu				
					1	2	3	4	5
Milk, dry, modified, sweetened	300 x 200	3	MIL-M-3260		1	1	1	1	1
Bar, chocolate, sweet		1	MIL-C-1323 and par. 3.6.5	Type I Class 2	10	10		10	10
Bar, caramel-nougat		1-1/2	MIL-C-1424 and par. 3.6.4	Type III Class 3	3		3		3
Bar, chocolate coconut		1-1/2	MIL-C-1424 and par. 3.6.4	Type III Class 1		3		3	
Bar, starch-jelly		2	MIL-C-1424 and par. 3.6.2	Type IV Class 2			5		
Catsup	300 x 108	4	JJJ-C-91 and par. 5.1.1	Type I Grade A		1		1	
Cocoa		1-1/2	MIL-C-3031 and par. 3.6.9	Type I Class 1	5	5	5	5	5
Coffee	211 x 214	4 (Type II) 2 (Type I)	MIL-C-1019	Type I or II Class B	1	1	1	1	1
Jam	211 x 304	11	Z-J-96 and par. 3.6.8, 5.1.1	Type I Strawberry	1			1	
Jam	211 x 304	11	Z-J-96 and par. 3.6.8, 5.1.1	Type I Peach		1			1
Jam	211 x 304	11	Z-J-96 and par. 3.6.8, 5.1.1	Type I Grape			1		
Jam	211 x 304	11	Z-J-96 and par. 3.6.8, 5.1.1	Type I Cherry			1	1	
Jam	211 x 304	11	Z-J-96 and par. 3.6.8, 5.1.1	Type I Plum		1			1
Gum, chewing candy-coated		10 or 12 tablets	MIL-C-10022 & par. 3.6.13	Type II	3	3	3	3	3
Peanuts, roasted	300 x 308	7-1/2	MIL-P-831	Type I Class 2	1			1	1
Salt		1	SS-S-31 and par. 3.6.7	Type II	1	1	1	1	1
Sugar		3	JJJ-S-791 and par. 3.6.3	Type I(a)	3	3	3	3	3
Cigarettes		20 each	No spec. See par. 3.6.10		5	5	5	5	5
Matches, safety		20 splints	To be furnished by OMC. See par. 3.6.12		5	5	5	5	5
Opener, can		1	USA 28-135		2	2	2	2	2
Nonwoven fabric		11-1/2 by 19 inches	Par. 3.6.14		15	15	15	15	15
Tablets, water-purification, individual, chlorine		25 tablets	Purchase description dated 8 Sept. 1950		1	1	1	1	1
Cherry chocolate roll		1-1/3	See par. 3.6.4		2	2	2	2	2

Table I.—Ration components (continued)

Product	Container	Minimum net wt. (ounces)	Specification	Type Grade Class	Number of units per menu				
					1	2	3	4	5
Paper, toilet		125 sheets	UU-P-556 and par. 3.6.11	Type II	1	1	1	1	1
Soap, all- purpose			USA 22-275		1	1	1	1	1
Menu			See par. 3.7		1	1	1	1	1

### 3.6 Exceptions and additions to referenced specifications.

**3.6.1 Bread-type unit.**—The components of the bread-type unit (10 round crackers, class 3, size C, as specified in Specification MIL-C-1324) shall be placed in a key-opening, open-top, hermetically sealed style, round, metal can, size 401 by 411, with soldered side seam and compound-lined double-seamed ends. The can shall be made throughout from commercial 0.50-pound electrolytic tin plate. A corrosion-resistant key shall be attached to the bottom of the can by soldering or welding, using a non-corrosive flux. The crackers shall be packaged in the can and shall be protected from breakage by a liner and pads of single-faced corrugated material made from two sheets of grease-resistant glassine, parchment, or grease-proof paper, each having a basis weight of not less than 25 pounds per ream (24 by 36 - 500) and a grease resistance of not less than 300 seconds (TAPPI T-454). The liner shall completely cover the inside body surface of the can and shall be so placed that the tips of the corrugations are in contact with the walls. Two pads shall be placed at the bottom of the can and two pads shall be placed between the fifth and sixth crackers. The pads shall have the smooth surfaces in contact with each other. The following label information shall be lithographed in black on the lid of the can in accordance with Specification MIL-L-1497:

BREAD TYPE UNIT (in letters larger than any others  
used for the label)

Net weight \_\_\_\_\_

Packed by \_\_\_\_\_

**3.6.2 Starch-jelly bar.**—The starch jelly bar shall comply with Specification MIL-C-1424 and shall consist of four separate pieces of approximately the same dimensions. The over-all dimensions of the four pieces wrapped in one package shall be approximately 3-1/8 inches in length, 1-1/4 inches in width, and 3/4 inch in thickness. Each piece in the package shall be of a different flavor.

**3.6.3 Sugar.**—Three ounces of sugar shall be packaged in an envelope 5-3/4 ± 1/8 inches long by 3-1/2 ± 1/8 inches wide inside. Alternatively, if the package is fabricated, filled, and sealed in one operation on automatic equipment, the inside dimensions of the finished package shall be 5 ± 1/8 inches by 3-1/2 ± 1/8 inches. The envelope shall be made of polyethylene-coated kraft paper. The kraft paper shall have a minimum basis weight of 35 pounds per ream (24 by 36 - 500). The polyethylene coating shall have a minimum thickness of 0.001 inch and shall be uniformly applied. The seams and closure of the envelope shall be made by heat sealing. The heat seals shall be approximately 3/8-inch but not less than 5/16-inch wide. The following information shall be

requirements of each menu and in the most convenient compact manner. The cartons shall be made in accordance with style III, type A, class 2 of Specification JAN-P-120, except that side tuck-in flaps are not required and the length of the front flap shall be not less than one inch. The carton size shall be  $11-13/16 \pm 1/16$  inches in length by  $7-3/4 \pm 1/16$  inches in width by  $2-5/16 \pm 1/16$  inches in depth. The folding carton shall be manufactured from board having an average bursting strength of not less than 150 pounds per square inch when tested in accordance with methods specified in Specification UV-P-31. The board used shall be of solid kraft, minimum thickness 0.030 inch, or kraft-lined chipboard, minimum thickness 0.040 inch. Folding cartons equivalent in style and type to that specified will be acceptable upon approval of the contracting officer.

5.2.1.1 The filled and closed carton specified in 5.2.1 shall be inclosed in a waterproof bag as specified in 5.2.1.1.1. The mouth of the bag shall be over one end panel with the side seams of the bag over the sides of the carton. The bags shall be preformed on a mandrel or jig that will not strain the seams or puncture the material. The filled carton shall have any sharpness of the corners removed prior to inserting into the bag. Excess air shall be removed from the filled bags, before sealing, by vacuumizing or by other suitable means. The corners of the bag shall be folded against the end panels of the carton. The filled and sealed bags shall be tested for leaks as specified in 4.5.3. If more than 10 percent of the bags so tested indicate a leak, the entire lot shall be rejected.

5.2.1.1.1 Waterproof bag. - The bag shall be of the flat envelope type, heat-sealed on three edges. The inside dimensions of the bag shall be  $16-5/8 \pm 1/8$  inches in length by  $11-1/4 \pm 1/8$  inches in width, with the mouth of the bag parallel to the width. The bag shall be made from one of the following materials with the cloth on the outside:

Vinyl film (minimum 0.001 inch) to aluminum foil (minimum 0.001 inch) to vinyl film (minimum 0.002 inch) to cloth.

Polyethylene film (minimum 0.002 inch) to kraft paper (50 pounds per ream, 24 x 36 - 500) to aluminum foil (minimum 0.0015 inch) to cloth.

Polyethylene film (minimum 0.002 inch) to aluminum foil (minimum 0.0015 inch) to kraft paper (50 pounds per ream, 24 x 36 - 500) to cloth.

Vinyl film (minimum 0.0012 inch) to aluminum foil (minimum 0.001 inch) to polyethylene film (minimum 0.0015 inch) to cloth.

Polyethylene film (minimum 0.002 inch) to aluminum foil (minimum 0.001 inch) to cloth.

Polyethylene film (minimum 0.003 inch) to aluminum foil (minimum 0.001 inch) to cloth.

5.2.1.1.1. The waterproof bag shall be made of materials which have been bonded by laminating or coating in the arrangements specified in 5.2.1.1. Adhesives used in laminating shall be permanently plastic. Vinyl films shall be made of all-new vinyl resins. The finished sheet shall not block and shall be essentially free of odors. The finished sheet shall have a minimum tensile strength of 18 pounds per inch of width when tested on a pendulum-type tester with jaws separating at a speed of 12 inches per minute. The cloth shall have a minimum count of 44 by 36. Substitutes for cloth must be approved by the contracting officer. The manufacturers seams shall be waterproof and shall be so constructed as to permit compliance with 4.3.2 by the ration assembler.

5.2.1.2. The folding carton, with waterproof bag as specified in 5.2.1.1, shall be placed in a snug-fitting two-piece slide box having an inner and outer slide as illustrated in figure 3 of Specification MIL-R-631. The two-piece slide box shall be made from W's solid fiberboard as specified in Specification JAN-P-108. The body joint of the outer slide shall be taped with not less than 2-inch-wide cloth tape or water-resistant gummed tape conforming to Specification JAN-P-128. The joint of the outer slide may be stapled provided that the joint is made on one of the wide panels. The inside dimensions of the box shall be 12-9/16  $\pm$  1/8 inches in length by 8-1/4  $\pm$  1/8 inches in width by 2-15/16  $\pm$  1/8 inches in depth.

5.2.1.3. No labeling is necessary on the two-piece slide fiberboard box.

5.2.2 Final assembly.--The canned items, dry pack (5.2.1), and soap for all menus shall be packed in a fiberboard container, with sleeve, made, sealed, and strapped in accordance with style RSC-SL, compliance symbol V2s of Specification JAN-P-108. The fiberboard container shall be 13-3/8  $\pm$  1/8 inches in length by 12-3/4  $\pm$  1/8 inches in width by 9  $\pm$  1/8 inches in depth. The container shall be strapped with two straps applied at right angles to each other. One strap shall be centered over the top, sides, and bottom; and the other shall be centered over the top, ends, and bottom. The longer strap shall be applied first.

5.2.2.1 Arrangement of items.--The dry pack, soap, and canned items required according to 3.5 shall be arranged as specified in appendix II. Pads and dividers shall be made and inserted as specified in appendix II and shall be made from W's solid fiberboard as specified in Specification JAN-P-108.

### 5.3 Marking of shipments.

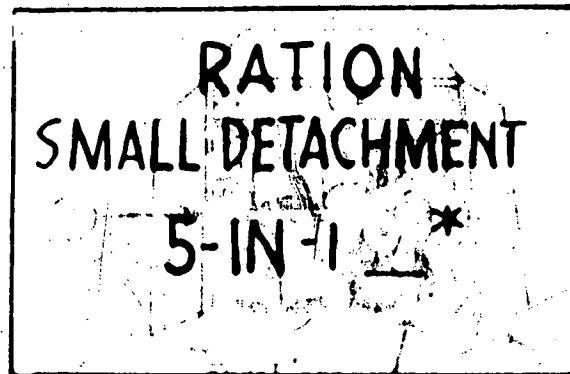
5.3.1 Ration containers.--Marking shall be in accordance with Specification OOMG 94 and as specified in appendix I. Lettering shall be jet black.

5.3.2 Navy.--In addition to the marking specified in 5.3.1 and any special marking required by the contract or order, shipments for the Navy shall be marked in accordance with the Navy Shipment Marking Handbook.

5.3.3 Marine Corps.--Shipments for the Marine Corps shall be marked as specified (see 6.1).

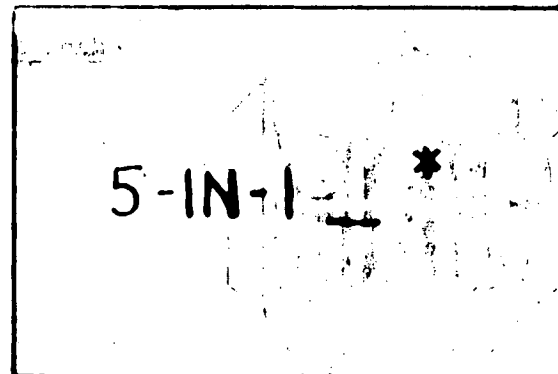
5.3.4 Air Force.--In addition to the marking specified in 5.3.1 and any special marking required by the contract or order, shipments for the Air Force shall be marked in accordance with Specification 94-40645.

Markings for sleeve and box for  
Ration, Small Detachment, 5-in-1



Top of sleeve

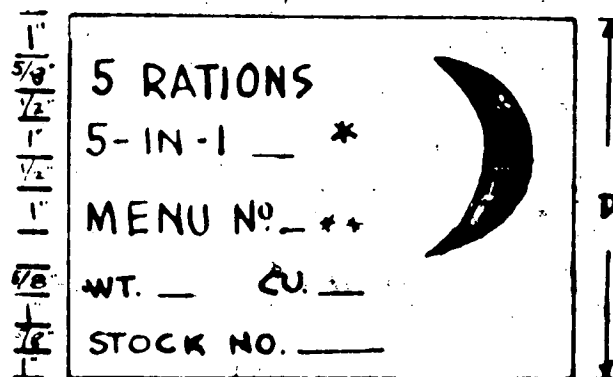
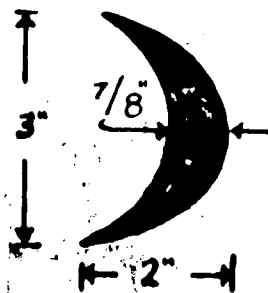
All lettering to be approximately 2 inches but not less than 1-1/2 inches high.



Bottom of sleeve

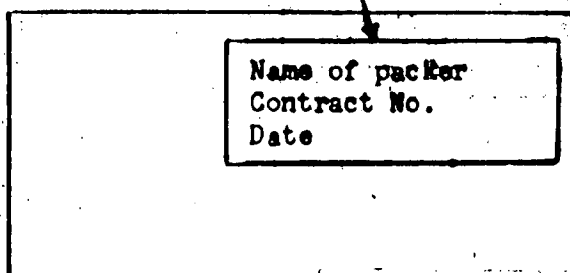
All letters to be approximately 2 inches high.

Stencil or print as per sample in 42 square inches. Characters to be in largest type possible.



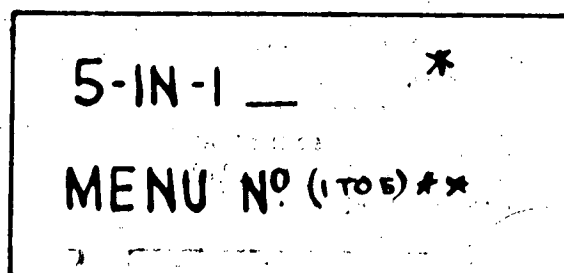
End of sleeve

Crescent as per detail



Side of case

(Marked end of sleeve to right)



Opposite side of case

(All letters to be approximately 2 inches high.)

\*Letter suffix to be added to "5-in-1" to be as shown in procurement documents (see 6.1).

\*\*Appropriate menu number.